Building Cities in the Rain
Working Group
April 20, 2015
Meeting Summary

Participants: Bruce Wulkan, Puget Sound Partnership; Phyllis Varner, City of Bellevue; Scott Stolnack, WRIA 8/King County (by phone); Dan Gariepy and Abbey Stockwell, Department of Ecology; Heather Trim, Futurewise; John Lenth, Herrera; John Palmer, EPA; Doug Navetski, King County; Lorna Mauren, City of Tacoma; Lynn Kohn and Heather Ballash, Washington State Department of Commerce.

General updates
- Bob Vadas from WDFW will not be able to participate in any more meetings because the Department is out of budget. Heather B has reached out to the agency to request they assign staff to review and provide comments on the draft guidance from this group.
- Larry Schaffner is too busy to attend further meetings.
- Heather B. has spoken with Laura Blackmore about updates on this project to Puget Sound Recovery Council (July 16 meeting) the South Central LIO (September 9 meeting).

Update on Ecology guidance regarding a stormwater control transfer program
The draft Ecology guidance is in final form and is being reviewed by management. It should be available for public comment and presentation to the Work Group no later than the May 20 meeting. *[The May 11 meeting has been cancelled because the guidance will not be ready.]* There will be a 60-day public review period. It will go out to the Work Group and the public for review at the same time. Ecology will be presenting the guidance to the APWA and permit coordinators also.

Transfers of Toxic Controls
The group continued its discussion from the last meeting regarding whether toxic controls should be transferred. The group discussed the value of the information presented in *Landscape Exotoxicology of Coho Salmon Spawner Mortality in Urban Streams*, Feist et al., August 2011 (see a copy of the article in the meeting materials at
https://www.ezview.wa.gov/Portals/_1780/Documents/20150420/Feist%20et%20al%202011.pdf).

Discussion summary:
- It was proposed that the group focus on hot spots using this kind of information. However, others noted that a focus on hot spots is more appropriate for a retrofit program (e.g. regional facilities) than a transfer program.
- While the article is a good source of information, including the map of the six study sites, it is a model and not a source of data. It would be very expensive to collect the data, and could kill a transfer program.
- It was noted that the three types of conditions in the article that contribute to fish mortality in a basin – local roads, impervious surface, and commercial property – are included in the local data that will be recommended by the guidance.
- It was also noted that funding for flow control or runoff treatment is based on random redevelopment. It is not based on sampling.
- While toxics are bad for fish, it is not clear how that relates to a transfer program. Receiving areas do not appear to be where there will be a big toxics problem. The problem is mostly in sending areas. The question is what is the currency that is being transferred? It doesn't make

sense to transfer a requirement to a place that doesn't have issues. (see more notes on currency issue below)

- We are in a period of transition – don't know the chemicals that cause harm or what the treatment should be. **The group agreed that the guidance should provide flexibility so that toxic controls are considered for transfer when the data becomes available.**

<u>Basic v. enhanced treatment transfers</u>
The group did not come to agreement on whether both basic and enhanced treatment should be transferred. However, the Ecology guidance will allow transfers of both basic and enhanced treatment.

Other notes:
- Transfers of enhanced treatment become complex very quickly based on the Redmond experience with implementation of its transfer program. Redmond did not consider transferring toxic controls. They looked at BIBI scores and other factors that suggest systems are functional.
- Because pollutants are associated with volume, transfers of flow control will also result in transfers of runoff treatment.
- If the sending area has salmon, it would be a bad idea to transfer runoff treatment to another area. A transfer program only works if there aren't valuable conditions in the sending area.
- Basic treatment is much less expensive than flow control. There hasn't been a lot of concern with runoff treatment requirements.
- **The group agreed that pollutant load in sending and receiving areas could be very different. The load should be roughly equal between sending and receiving areas.**

<u>Currency of transfers</u>
As noted above, the question arose as to what the currency is for transfers. There was a discussion of whether it should be cost, land cover (Redmond), etc. Ecology staff noted that their guidance will address the currency issue – the group agreed to wait to hear the presentation on their guidance at the next meeting to give them input.

<u>Runoff treatment prioritization data</u>
The group agreed to reclassify the number of outfalls and ditches, number of culvert crossings/1,000 linear feet, and number of mapped ditch outfalls to essential data to have from not needed data. They are essential to have with the qualifier that they are known (see attached updated Watershed Prioritization Criteria Review – Flow Control and Runoff Treatment).

<u>Draft Prioritization Process for Runoff Treatment</u>
The group made some refinements to the Draft Prioritization Process for Flow Control from March 31. They agreed that there should not be a separate prioritization process for runoff treatment as much of the data is the same. They agreed to add in data for the prioritization process for runoff treatment (see attached Draft Prioritization Process for Flow Control <u>and</u> Runoff Treatment).

<u>Next meeting topics</u>
Presentation of Ecology guidance on the mechanism for transfering stormwater control requirements based on a basin plan.

<u>Next meeting dates</u>:
- May 20, 10:00 a.m. – 1:00 p.m., City of Tacoma Center for Urban Waters

- June 1, 10:00 a.m. – 1:00 p.m., Puget Sound Regional Council, Seattle

Watershed Prioritization Criteria Review--Flow Control and Runoff Treatment

(4-20-15)

Information Category	Data Type	Flow Control Prioritization Status			Runoff Treatment Priortization Status			Comments/Notes
		Essential	Helpful	Unnec	Essential	Helpful	Unnec	
Existing/current land cover data	% forest, pasture, landscaping, TIA	X			X			
Existing/current land use data	% commercial, industrial, roads, SFR, MFR, parks, undeveloped		X		X			Runoff treatment note: Go to like land use or dirtier land use.
Zoned land use/land cover	zoning designations - commercial, industrial, SFR, MFR, parks	X			X			
Physical parameters	Watershed area data: inside city limits/outside city limits - stream area inside and outside city	X			X			
Physical parameters	stream length--within limits vs. outside - total stream miles		X			X		
Physical parameters	Class II (Type F plus S) stream length (within limits vs. outside) - total stream miles		X			X		
Fish Use	Significant salmonid use							Delete
Fish Use	Current Chinook salmon use	X				X		
Fish Use	Current Coho salmon use	X				X		
Fish Use	Other salmonid use	X				X		
Fish Use	Potential fish use	X				X		
Habitat	Naturally occurring LWD		X				X	
Habitat	Tree canopy %	X			X			
Habitat	% of intact 300-foot vegetated stream buffer		X			X		
Habitat	% of intact 100-foot vegetated stream buffer	X			X			
Water Quality/Habitat	BIBI where appropriate to measure aquatic health	X			X			
Water Quality	Shellfish bed health - shellfish bed closure(s)		X		X			
Water Quality	Ecology listed WQ impairments - State WQ Assessment (cat 4a, 4b, 4c, or 5)	X			X			

Watershed Prioritization Criteria Review--Flow Control and Runoff Treatment

(4-20-15)

Information Category	Data Type	Flow Control Prioritization Status			Runoff Treatment Priortization Status			Comments/Notes
		Essential	Helpful	Unnec	Essential	Helpful	Unnec	
Water Quality	Known water quality concerns based on local data				X			
Stormwater Influence	High vehicle traffic areas - AADT>7,500			X	X			
Stormwater Influence	Outdated flow control infrastructure needing retrofit - % of watershed developed before [DATE]	X					X	
Stormwater Influence	Total acres/% of developed watershed not meeting basic WQ treatment to meet new or redevelopment standards			X	X			Redmond based this on design standards for retrofits. Percentage was calculated using the entire watershed area within Redmond minus areas that currently contribute runoff to a basic treatment facility or are currently forest or pasture.
Stormwater Influence	Known # outfalls and ditches	X		X	X			Group changed this to known and moved it from unnecessary to essential
Stormwater Influence	Known # culvert crossings/1,000 lf	X			X			Group changed this to known and moved it from unnecessary to essential
Stormwater Influence	Known # mapped ditch outfalls	X			X			Group changed this to known and moved it from unnecessary to essential
Missing data?								

Draft Prioritization Process for Flow Control
and *Runoff Treatment[1]*
4-20-15

Level 1: Fish Use – Biological conditions and potential for lift: can support actual or potential fish use *(or shellfish beds, if appropriate)*
- How much of the watershed is available for or will be available for fish use (Presence of culverts or other barriers, including natural barriers)
- Tree canopy/condition of buffer, with the provision that these may be considered at Level 2.
- BIBI
- Known water quality impairment- 303 listings and TMDLs, or low instream flows
- Known water quality concerns based on local data

Level 2: Restoration opportunities
- Physical flow control and runoff treatment
  - Percentage of impervious area
  - Land cover
  - Current land use
  - Zoning/potential for growth
  - Age and condition of infrastructure
  - Jurisdictional influence, within jurisdictional control
  - Ripeness to proceed (local knowledge, aligns with programs such as tree planting, capital improvement plan, etc.)
  - Watershed area data (inside vs. outside jurisdictional boundaries)
  - Number of known MS4 outfalls and ditches directly discharging to surface waters
  - Number of known culvert crossings/1,000 ft
  - Number of mapped ditch outfalls
  - *High vehicle traffic areas – AADT > 7,500*
  - *Total acres/% of developed watershed not meeting basic water quality treatment to meet new or redevelopment standards*
- Coordination with state, regional and local plans
  - Comprehensive plans
  - Salmon recovery plans (3-year workplans, WRIA priorities)
  - TMDL plans (active and planned)
  - Regional ecosystem goals, e.g. BIBI

The group agreed on March 31 that:
- The guidance shouldn't use the term "phasing" because it could be confused with the Phase I and Phase II permits. Use the term Level 1 screen, or step, etc. Folks will think about other terms that might be most useful. An introductory paragraph in the guidance will explain the function of the levels for purposes of prioritization. (Erika noted we also had trouble with the term screen because people thought of it as screening out. Step is probably safer.)
- Level 1 evaluation should be a "preponderance of the evidence", rather than a determination of whether a watershed is in or out of the prioritization for retrofits. It was noted that Redmond

---

[1] Data in italics apply only to prioritization for runoff treatment transfers. All other data apply to prioritization for both flow control and runoff treatment transfers.

does not leave any watershed out - its prioritization simply determined which watersheds will be retrofitted first. The group noted that while Level 1 is not limited to fish use, it is likely to be the highest beneficial use in urban areas. Using a case study to explain this would be helpful.

- There should be two levels of process, not three - levels 2 and 3 from the meeting handout should be combined.
- Level 1 is not a higher priority than Level 2, they are just different steps in the process. The goal is to make the process easier by providing an analytical tool.
- The group will need to go back and look at possibly including other beneficial uses besides fish use (e.g., recreational use or shellfish harvest). However, it was noted that in urban areas fish use is the probably the highest beneficial use.